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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,281	12/15/2003	Patrick L. Crane	NOR /1120	4286
37172	7590	09/12/2005	EXAMINER	
WOOD, HERRON & EVANS, LLP (NORDSON) 2700 CAREW TOWER 441 VINE STREET CINCINNATI, OH 45202			EDWARDS, NEWTON O	
			ART UNIT	PAPER NUMBER
			1774	

DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

7. p

<b>Office Action Summary</b>	Application No. 10/736,281	Applicant(s) CRANE, PATRICK L.	
	Examiner N Edwards	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 12-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) 1-11 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br/>Paper No(s)/Mail Date <u>4/28/05 → 3/26/04</u></p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)<br/>Paper No(s)/Mail Date. ____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: ____</p> |
|---|--|

*mu*

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-11, drawn to a non-woven, classified in class 442, subclass 364.
- II. Claims 12-17, drawn to a method of making, classified in class 264, subclass 103P.

The inventions are distinct, each from the other because:

Inventions Group I and Group II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by a materially different product such as spinning, co-extruding combining, drawing, quenching, and winding:

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

During a telephone conversation with William Allen on June 15, 2005 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-11. Affirmation of this election must be made by applicant in replying to this

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Office action. Claims 12-17 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the pathway—promoting agent of claim 6 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification as filed is objected under 35 U.S.C. 112, first paragraph, for failing to provide an adequately written description of the invention and failing to provide an enabling disclosure.

The specification as filed fails to set forth 1) what defines or constitute a liquid – pervious sheath region claim 1; 2) what defines or constitute a melt processable superabsorbent polymer of claim 1; 3) how to make a superabsorbent polymer; 4) what defines or constitute a super absorbent polymer matrix of claim 8; 5) how is make to a super absorbent polymer matrix; 6) how does the super absorbent polymer comprise a super absorbent polymer matrix of claim 8; 7) what defines or constitute a pathway—promoting agent of claims 5 and; 8) what constitutes a plurality of liquid pathways of claim 4.

Claims 1-11 are rejected under 35 U.S.C. 112, first paragraph, for the reasons given above in the objection.

Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, line 3, "a liquid-pervious sheath" is vague and indefinite as to the meaning of the phrase.

Claim 1, line 6 "a ... super-absorbent polymer" is vague and indefinite as the meaning of the phrase. Is it a super-absorbent particle (SAP), SAP and a polymer, or a super-absorbent polymer with no particles (granules) present? See all claims for the same problem noting that claim 8 has granules or particles present but claim 2 is only a super-absorbent polymer.

Claim 4, line 2 "plurality of liquid pathway" is vague and indefinite as to the meaning of the phrase.

Claim 5, overall is vague and indefinite because; 1) "a pathway promoting agent" is vague and indefinite to the meaning of the phrase; 2) the process step of adding a pathway promoting agent to thermoplastic come before the forming of the multi-component filament of claim 1. Hence the 5 fails to further limit the multi-component filament under 35 U.S.C. 112; 3) claim 5 pathway promoting agent is (dependent) and added to the super-absorbent polymer of claim 3 and 2 which is found in the core of claim 1. The forgoing is not found in your spec. Correction is required.

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Claim 6, overall is vague and indefinite because; 1) claim 6 fails to convey what has the "plurality of discrete portions and; 2) claim 6 also fails to convey what has the plurality of voids in which the super-absorbent polymer may expand into.

Claim 8, overall is vague and indefinite because; 1) the meaning of a super absorbent polymer matrix is not known, and 2) claim 8 fails to convey how a super absorbent polymer includes a super-absorber polymer matrix. Note calling the same thing a confusing variety of names is not permitted.

Claim 9, overall is vague and indefinite because; 1) the body of claim 1 lacks proper antecedent basis the term plurality of filaments and; 2) how the super-absorbent polymer (found in the body of the claim 1) can comprise at least 50% ... filaments found in the preamble of the claim.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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Claims 1, 2, 3, 4, 8, 10 and 11 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Achille (WO 02/07791).

Achille teaches a non-woven web comprising a bi-component fiber (include a sheath core fiber) in which the sheath or core can be made from a blend of one or more super-absorber polymers (SAP) and one or more thermoplastic resin (see claims 1, 17, 19 and 20). Achille further teaches the SAP can be polyacrlate, for example, at page 10. Achille still further teaches the SAP has a particle size distribution (which is single particle or agglomerates of particles) of to 300 micrometer as powder form.

Achille yet still further teaches non-woven web can be use in a hygienic article such as a sanitary napkin at page 10. Achille also teaches the non-woven web is used in disposable absorbent articles which mean the sheath layer of the bi-component fiber must be liquid pervious.

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-6, 7 and 8-11 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Evan (U.S. 6,342,298).

Evan teaches multi-component super-absorbent (particles polymer) fiber or multi-component SAP fiber in a sheath core form in which the core can be polyacrylate, or polyacid acid for example and the sheath can be a thermoplastic SAP (see column 5, lines 24-40, column 17, lines 30-46, Figures 3A, 31 and column 27, example 12, (heating SAP and co-extruding show thermoplastic quality). Evan further teaches in Figures 11 and 12 that the multi-component SAP has voids or liquid pathways in the core (center) and sheath of the fiber. Evan teaches of SAP particle is generic and



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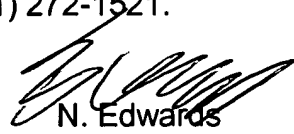
includes SAP granules and SAP agglomerates. Evans still further teaches the multi-component SAP fiber can be used in hygienic goods such as diapers (non-woven fabric) at column 21.

Claims 1, 10 and 11 are rejected under 35 U.S.C 102 (b) as being clearly anticipated by Cohen (US 5,334,177).

Cohen teaches a fluid absorbing article such as a diaper (non-woven) , for example, comprising a core (zone of vulnerability) and at least one liquid permeable sheath (at least one additional core) wherein the core can include a SAP. See Fig 6, claims 1 , claim 13, and column 4.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The enclosed patents disclose the state of the prior art and can be used to make this case FINAL.

Any inquiry concerning this communication should be directed to Primary Examiner Edwards at telephone number (571) 272-1521.

  
N. Edwards  
Primary Examiner  
A.U. 1774